

Appl. No. 10/084,834  
Amdt. Dated January 25, 2007  
Reply to Office Action of December 14, 2006

Attorney Docket No. 83388.0001  
Customer No.: 26021

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REMARKS

This application has been carefully reviewed in light of the Office Action dated December 14, 2006. Claims 1-22 remain in this application. Claims 1, 2, 3, 6, 7, and 8 are the independent Claims. Claims 1, 2, 3, 6, and 8 have been amended. It is believed that no new matter is involved in the amendments or arguments presented herein. Reconsideration and entrance of the amendment in the application are respectfully requested.

Art-Based Rejections

Claims 1-15 and 17-22 were rejected under 35 U.S.C. § 102(e) over U.S. Patent No. 6,677,854 (Dix); Claim 16 was rejected under 35 U.S.C. § 103(a) over the same. Applicant respectfully traverses the rejections and submits that the claims herein are patentable in light of the clarifying amendments above and the arguments below.

The Dix Reference

Dix is directed to a method for determining where vehicle servicing or maintenance is required (*Dix Abstract*). According to Dix, the method includes the step of periodically storing a multiple of values indicative of physical parameters of a vehicle in an electronic memory of the vehicle. The multiple of values are transmitted over at least one wireless link to a remote maintenance computer. The multiple of vehicle parameters are analyzed in the remote maintenance computer to determine if maintenance is needed. Data indicative of needed maintenance are transmitted over the wireless link to the vehicle. A message indicative of the needed maintenance is display to the operator. (*See Dix at col. 1, lines 49-61*).

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**The Claims are Patentable Over the Cited References**

The present application is generally directed to methods of assisting equipment maintenance.

As defined by amended independent Claim 1, an equipment maintenance work assisting method includes a maintenance work assisting server accepting and storing a maintenance service content which a customer has specified from a customer system and information indicating a range that can be disclosed about a customer equipment via a network.

The maintenance work assisting fetches via the network and analyzes server equipment information about the customer equipment according to the maintenance service content, which has been loaded from the customer system, to decide whether a condition for performing maintenance is satisfied.

When it is decided that maintenance is required, the maintenance work assisting server creates a maintenance service assisting program for maintenance order, including information that is a basis of determining the maintenance is required, and information required for maintenance order, and transmits the program to the customer via the network.

Dix does not disclose or suggest the features recited in amended independent Claim 1. First, Dix does not disclose or suggest, "accepting and storing in a maintenance work assisting server a maintenance service content which a customer has specified from a customer system and information indicating a range that can be disclosed about a customer equipment, via a network," as recited in that claim.

There is no dispute that the vehicle of Dix corresponds to "equipment" recited in the claims. Dix teaches the transponder (20) remotely downloads from the central controller (200) vehicle maintenance criteria to the transponder (20), such as

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a total distance which the operator is permitted to travel (*Dix at col. 4, line 63-col. 5, line 7*). The Office Action asserts the above disclosure constitutes the feature that the maintenance work assisting server accepts and stores a maintenance service content which a customer has specified from a customer system and information indicating a range that can be disclosed about a customer equipment via a network (*Office Action at page 3, lines 1-9*). Here, the transponder corresponds to the "maintenance work assisting server" recited in amended independent Claim 1, in that the transponder downloads the vehicle maintenance criteria from the central controller. However, it is well known by persons in the art that a transponder is not a server. Accordingly, Dix cannot be said to disclose or suggest that feature.

Second, Dix also does not disclose or suggest, "fetching via the network and analyzing by the maintenance work assisting server equipment information about the customer equipment according to the maintenance service content which has been loaded from the customer system, to decide whether a condition for performing maintenance is satisfied," as recited in amended independent Claim 1. Here again, the transponder is not seen to analyze equipment information and to decide whether a condition for performing maintenance is satisfied.

Furthermore, the above feature includes the maintenance work assisting server fetching equipment information (vehicle information in Dix) via a network. Here, the purported maintenance work assisting server, the transponder, communicates with the vehicle via radio transmission (*Dix at col. 5, lines 54-59*). However, the point-to-point radio transmission is not a network as recited in Claim 1.

Finally, the construction where the transponder is deemed to be equivalent to the "maintenance work assisting server" does not satisfy the feature, "when it is

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decided that maintenance is required, creating a maintenance service assisting program by the maintenance work assisting server for maintenance order," recited in amended independent Claim 1. The transponder is not seen to create a maintenance service assisting program. Dix thus does not disclose or suggest that feature.

Accordingly, Dix cannot be said to disclose or suggest the features of amended independent Claim 1.

Alternatively, the Office Action also asserts that Dix discloses a method for determining whether a vehicle needs maintenance, and that method teaches the above features of amended independent Claim 1. The method includes the steps of periodically storing a plurality of values indicative of physical parameters of a vehicle in an electronic memory of the vehicle, transmitting the plurality of values of at least one wireless link to a remote maintenance computer, analyzing the plurality of vehicle parameters in the remote maintenance computer to determine if maintenance is needed. (*Dix at col. 1, lines 52-59*). Here, the purported "maintenance work assist server" is the central controller (200). (*Office Action at page 8-9, paragraph (b); Dix at col. 2, lines 15-19 and col. 5, lines 8-25*).

This construction, however, fails to disclose "accepting and storing in a maintenance work assisting server a maintenance service content which a customer has specified from a customer system and information indicating a range that can be disclosed about a customer equipment, via a network," recited in amended independent Claim 1. Dix is silent regarding the central controller accepting and storing a maintenance service content which a customer has specified via a network.

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Accordingly, under both constructions, Dix still does not disclose or suggest all the features of independent Claim 1 as amended. That claim is thus allowable over Dix.

Regarding amended independent Claim 2, Dix is not seen to disclose or suggest, "accepting and storing in a maintenance work assisting server an available maintenance work menu from respective equipment maintenance service enterprise systems," and, "when a maintenance order from a customer system to an equipment maintenance service enterprise is accepted in the maintenance work assisting server," recited in that claim.

The Specification at page 9, line 1-3 recites, "In Fig. 1, an equipment maintenance service enterprise 13 offers a maintenance service to a customer..." The "equipment maintenance service enterprise" is thus the entity performing the maintenance service on the customer's equipment. In Dix, that entity includes the remote maintenance personnel that perform maintenance service of the vehicle (*Dix at col. 17, lines 17-28*).

However, Dix is silent regarding the transponder or the central controller accepting and storing an available maintenance work menu from the remote maintenance personnel, as recited in independent Claim 2. Moreover, Dix is silent regarding a maintenance order from a customer system to the remote maintenance personnel, or that order being accepted in the transponder or central controller.

Accordingly, Dix does not disclose or suggest all the features recited in independent Claim 2 as amended. That claim is thus allowable over Dix.

Regarding amended independent Claim 3, that claim recites features similar to those of amended independent Claims 1 and 2 and, therefore, is also allowable over Dix.

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Regarding amended independent Claim 6, Dix does not disclose or suggest, "a profile storage block for accepting and storing a maintenance service content, which includes equipment identification and maintenance policy, requested by a customer via a customer system," as recited in amended independent Claim 6.

The Office Action at page 16, paragraph (a), identifies the central controller as the "maintenance work assisting server" recited in independent Claim 6. Moreover, the Office Action at pages 6, lines 11-16, identifies the operator of the vehicle in Dix as "customer" recited in that claim. The Office Action further asserts that the vehicle data collected and transmitted by the operator as the "maintenance service content." The data may include vehicle temperature, pressure, or fluid level, elapsed engine hours, and time, date and location of the vehicle (*Dix at col. 1, line 50 - col. 2, line 9*).

However, these vehicle data are not maintenance policies. Policies, such as (1) a total distance which the operator is permitted to travel, (2) a geographical area in which the vehicle may only be operated in, (3) times and dates the vehicle is allowed to operate, (4) the total permitted operation time, (5) the subsystems the operator is allowed to use, or (6) messages that indicates the required vehicle service, are downloaded from the maintenance work assisting server (central controller) to the vehicle, and not from the customer (operator) to the maintenance work assisting server as recited in amended independent Claim 2.

Moreover, these policies cannot be said to be maintenance policy. Specification at page 15, lines 17-21, recites that an example of a maintenance policy is that the custom specifies a reference, and the allowed deviation from that reference before a maintenance is performed. Dix thus dose not disclose or suggest the features of independent Claim 6, as amended.

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Regarding independent Claim 7, Dix does not disclose or suggest, "a profile recording block for accepting available maintenance work menu loaded by the respective equipment maintenance service enterprises and storing the menu," as recited in that claim.

The Office Action at page 23, paragraph (b), asserts that Dix disclosing the central controller (the maintenance work assisting server) maintaining a list of required procedure for each particular vehicle as reciting that feature. However, Dix does not disclose or suggest the list of required procedure to be loaded by the respective equipment maintenance service enterprises as require by independent Claim 7.

The Specification at page 9, line 1-3 recites, "In Fig. 1, an equipment maintenance service enterprise 13 offers a maintenance service to a customer..." The "equipment maintenance service enterprise" is thus the entity performing the maintenance service on the customer's equipment. In Dix, that entity includes the remote maintenance personnel that perform maintenance service of the vehicle (*Dix at col. 17, lines 17-28*).

Dix is silent regarding the remote maintenance personnel loading the list of required procedure onto the central controller, as recited in independent Claim 7. Accordingly, Dix cannot be said to disclose or suggest features recited in that claim.

Regarding amended independent Claim 8, that claim recites features similar to those of amended independent Claims 6 and 7 and, therefore, is also allowable over Dix.

Since the applied reference fails to disclose, teach or suggest the above features recited in independent Claims 1-3 and 6-8, that reference cannot be said to anticipate or render obvious the invention which is the subject matter of that claim.

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Accordingly, the independent claims believed to be in condition for allowance and such allowance is respectfully requested.

The remaining claims depend either directly or indirectly from independent Claims 1, 2, 3, 6, 7, and 8, and recite additional features of the invention which are neither disclosed nor fairly suggested by the applied references and are therefore also believed to be in condition for allowance, and such allowance is respectfully requested.



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Conclusion

In view of the foregoing, it is respectfully submitted that the application is in condition for allowance. Reexamination and reconsideration of the application, as amended, are requested.

If for any reason the Examiner finds the application other than in condition for allowance, the Examiner is requested to call the undersigned attorney at the Los Angeles, California telephone number (310) 785-4721 to discuss the steps necessary for placing the application in condition for allowance.

If there are any fees due in connection with the filing of this response, please charge the fees to our Deposit Account No. 50-1314.

Respectfully submitted,

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Date: January 25, 2007

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